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**THE ANALYSIS OF THE PROBLEMS IN THE INDONESIA PUBLIC SECTOR IT  
PROCUREMENT PROCESSES: LEARNING FROM BPKP EXPERIENCES IN  
ADVISING AND ASSISTING  
SOME INDONESIA GOVERNMENT INSTITUTIONS**

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**ABSTRACT**

Total expended budget for IT infrastructure investment in the Indonesia public sector has grown up significantly. Unfortunately, the increase number in the IT infrastructure expenditure is not supported with a good IT procurement process. On the other side, IT infrastructure procurement process is one of the pillars in the IT governance, that is in the system realization process according to the National Information and Communication Technology Governance Guidance published by the Indonesia Ministry of Information and Communication.

This research is based on the experiences of BPKP in advising and assisting IT infrastructure procurement to some government institutions. Based on this research, it is concluded the President Degree No. 80/2003 (and the revision) that regulate public sector procurement could not solve some problems that have been faced by some people in the public sector IT infrastructure procurement processes. Some of the problems are discussed in this paper.

Analysis of this research is based on the ideal framework of IT infrastructure procurement process that is published by Cluster Consultant. Based on this framework, some problems in the IT infrastructure procurement process are analyzed. These problems are recommended to be solved by the Indonesia government so IT governance in the public sector could run well as written in the National Information and Communication Technology Governance Guidance.

**Keywords:** IT infrastructure procurement, public sector, IT governance.

The improvement of corruption investigation in Indonesia has made some public officers refuse to be involved in the procurement process. At the same time, there are some significant changes in the public sector procurement process after the revision of President Degree No. 80/2003, especially with the President Regulation No. 8/2006. On the other side, in the Indonesia budget year 2008 there is significant improvement in the capital/investment expenditure (48.6%), including capital expenditure for information technology (IT) infrastructure (Republic of Indonesia [RI], 2008). It is estimated that IT infrastructure expenditure in 2008 will grow up to 100 – 200% if compare to year 2007.

It is clear that the budget increase in the government IT infrastructure is very significant. Unfortunately, in the Indonesia budget realization year 2007 there are some problems in the public sector procurement processes. Therefore, Indonesia Anti-Corruption Committee (Komisi Pemberantasan Korupsi-KPK) has warned the urgency to run a good IT procurement process, especially in the National Identity Number Project (under Ministry of Home Affairs) that has spent 300 billion rupiahs or about 30 million US dollars (*Media Indonesia*, March 25, 2008). Even, recently there were also some discussion in the Indonesian electronic groups about the risk of IT procurement process in the Ministry of Home Affairs, that is local government financial system project with the budget about 30 million US dollars (loan financing from Asian Development Bank).

If not handled properly, the inefficiency and ineffectiveness in the Indonesia public sector IT infrastructure expenditure will be more uncontrollable and at the end it will reduce the IT governance in the Indonesia public sector, which is concerned by the Guidance of IT Public Sector Governance as published by Ministry of Communication and Technology.

### Research Methodology

This research is based on the experiences in advising and assisting the Indonesia public sector IT procurement in some public sector institutions, that is one in judiciary body, three in ministries level, and two in local governments level. For analysis, the research uses the ideal procurement process written by Custer Consultants (2003). Based on this framework, the ideal methodology for IT procurement processes are: (1) budget preparation, (2) team formation, (3) requirement analysis, (4) procurement planning, (5) request for information (RFI) and request for qualification (RFQ) publication, (6) procurement scoping, (7) request for proposal (RFP) preparation, (8) RFP publication and procurement controlling, (9) proposal evaluation, (10) winner submission and approval, (11) contract negotiation, (12) goods/services delivery, (13) acceptance testing, and (14) operation and technical support.

This research describes the real problems of IT procurement process in the Indonesia public sector. The objective of this research is to describe the existing problems in the IT procurement process so that the Indonesia government could design the proper action to solve the problems.

The meaning of IT infrastructure procurement in this research is all procurement that related with IT procurement in the public sector, especially for hardware, system software, application software, and so forth.





### **Research Finding and Analysis**

This research has found some findings about the problems in IT procurement process in the Indonesia public sector. The analysis of the findings is also described.

#### ***Budget Preparation***

Based on this study, it is found that in the budget preparation process for IT investment the term of reference (TOR) submitted to planning agency usually only described the short-term requirements, that is one year forward. Very rarely the government institutions have anticipated long-term requirements. Mostly it is because there is no IT blue-print in each public sector offices and also there is no national IT blue print for the Indonesia public sector yet (especially IT government enterprise architecture). Indonesia has only a general IT blue print.

It is also found that the TOR review activity by planning agency (Bappenas for state agency and Bappeda for local government) in the planning process is not in the full of meaning. As a result, even the integration of all IT procurement initiatives in one division of a government office/ministry could not be maintained well. It is more complicated when we related the integration of IT process with the IT procurement initiatives among all government institutions. The problem of the disconnected in the IT procurement process is also the reason why there is no integration in the IT government systems in the Indonesia public sector. Some planning agencies argue that this condition could be happened because the substance of IT procurement planning integration is under the control of the Ministry of Information and Technology, as also described in the Guidance of IT Public Sector Governance. Unfortunately, this Ministry has not provided significant roles in synchronizing all of the public sector IT procurement initiatives. It might be because the transformation of this Ministry from public relation ministry to information and technology ministry is not successfully yet or because it does not understand the important of its role to be put into operation.

The TOR submitted to planning agencies for IT budget is usually in the plain and only with some pages. Even, sometimes the TOR is submitted without feasibility study. Badly, this TOR usually prepared by the vendor and without the involvement of public sector staffs (vendor-driven). As a result, what to be submitted is not really needed by the public sector, but because there is new technology trend to be sold by the vendor, which is actually some of the technology that have been procured in the past had not been implemented yet or is still feasible to run the business.

In practice, the person who is responsible for IT management in one government office did not prepare most of the TOR for IT budget submission. Every division in the government offices tends to submit their IT budget initiatives without firstly discussed the proposal with the IT division in one government office. In some conditions, the division that is responsible in managing IT in one government office is not yet defined or not clearly defined in the formal structure of the government institution.

#### ***Team Formation***

In the public sector IT procurement process, mostly the employed team structures in the internal team of the government institution are limited to procurement team and acceptance/receiving team. It is very rarely the government institutions have setup some teams or



regulated some teams to include the end-user structure and organization. Project manager who has full responsibility in the IT procurement mostly is not supported with a comprehensive team. Ideally, in the IT infrastructure procurement there should be a comprehensive team, which is the composition of end-user team, development team, procurement team, technical team, end so on, based on the need and complexity of the IT infrastructure to be procured.

Unfortunately, even though there is a team that has been setup, mostly in the government sector no people who understand the existing system within the team. The team that has been setup mostly also without sufficient budget support. In practice, mostly it is assumed that the financing for the internal team from the government institution shall be handled by the cost of the contractor/consultant. This condition could make the team could not worked well as the controller in the implementation process because there is a conflict of interest. Unfortunately, the contractor/consultant will get some benefits with this condition. It is because all the payment to contractor/consultant would have direct effect to the payment to the internal team in the government office. As a result, the work quality of the contractor/consultant would be diminished.

### ***Requirement Preparation***

In practice, it is found that the government institutions have no capability in composing functional and technical requirements document for IT infrastructure procurement. Mostly they only prepared term of reference (TOR), which was used for budget submission. Mostly, the TOR is used directly as requirement document for the bidding process. In an ideal world, the requirement document for bidding process is dissimilar with the TOR for budgeting.

From the research observation, it is found that very rarely in the government institution that the requirement document comes from the internal people. Usually, the requirement document was prepared by third party, that is the planning consultant, and it is only practiced by state-owned companies or limited government institutions that have modernized their services. Unfortunately, there is a problem with requirement document that is prepared by the planning consultant. Usually, the requirement document that is prepared by the planning consultant inconsistent with what is needed by the end-user in the government office. Besides that, the officer who is responsible for one project (the project manager) could be replaced in the short-time before the IT project is finished. In practice, mostly there is no communication between the planning consultant recruited by past project manager with next project manager who replace the past project manager. As a result, the next project manager would make improvisation with the available requirement documents, without firstly has direct consultation with the planning consultant.

Unfortunately, the requirement documents that have been composed by the planning consultant mostly only handle what is "wanted", not what is really must be "done/required" to be supplied by the contractor/consultant. What is hard in the writing requirement document process actually is to define what is really required (in the functional and technical aspects) because the requirement will become the critical indicator in the bidding technical evaluation and the evaluation process of the job progress.



### *Procurement Planning*

The procurement planning process in the IT government procurement usually is limited to time schedule. Mostly, there are no planning for who will handle each activities in the schedule. Moreover, mostly the planning process is only handled by the team leader or secretary of the procurement committee, without the involvement of the other team members. Strangely, sometimes it is found that the bidding process has been started, but the requirement documents have not been finalized. It could make the procurement process in rush and the procurement product would not receive the qualified IT infrastructures.

### *RFI/RFQ Publication*

It is rarely there is RFI publication in the Indonesia IT government procurement. Ideally, RFI process in the IT procurement is very important, especially to get information if one product to be procured is still available in the market or produced by the principal/manufacture. From one interview with the respondent, there is no RFI in the IT government procurement usually to avoid perception from the contractor that have been asked for RFI felt they have big probability to win the bid and also to minimize the collusion behavior. In fact, RFI publication could be done formally through a letter and ask direct presentation from the vendor to the internal people of government office openly and it should be given not only to one principal/vendor. With this approach, a signal to the principal/vendor that there is no legal consequence for RFI process could be understood and could minimize the collusion behavior.

On the other side, RFQ publication in the Indonesia public sector is only done in the procurement process with prequalification system, especially for a complex system. Ideally, IT procurement should be through the RFQ process. Even if it is only for PCs procurements, there is still needed configuration or setup to be done by the expert team of the supplier who must have sufficient competency. Besides that reason, the prequalification process is important to make sure that the time needed for the technical evaluation in the next process could be minimized because only shortlisted bidders to be evaluated. From the experiences, evaluation process in the technical aspects stage with more five bidders would be exhausted and the evaluation process would not focus and could be wrong in deciding the winner.

### *Procurement Scoping*

In the IT procurement process, the procurement scope that has been defined by government institutions is usually only limited to system or hardware procurement. Only limited government institutions have described a comprehensive scoping, which included in their scope the divisions (offices) to be implemented, all features to be supplied, time-frame and phases, and all the technical experts required.

### *RFP Preparation*

Usually, in the Indonesia IT procurement process, RFP is not fully understand or accepted by the government institutions (limited to the TOR). In practice, RFP is only known for IT procurement that financed by donors and the RFP is usually prepared by technical assistance consultant. As a result, in the Indonesia procurement bidding document there are only number of hardware and the specification to be supplied, without the explanation of what to be installed or setup, or what to be configured by the contractor when delivering the hardware. With this



condition, in the implementation process, the contractor only installed, setup, or configured what can be done by the contractor expert team based on their knowledge, and not what was really needed or required to be implemented according to the end-user condition. Besides that, very rarely the Indonesia IT procurement document that have declared the existing environment and constraints, business requirements and system features, and technical requirements and specifications, which is part of the RFP international standard.

#### ***RFP Publication and Procurement Control***

Sometimes the RFPs in IT government procurement are not published or distributed timely. Even, strangely, some government institutions distributed the RFP document in the explanation meeting session. Consequently, the bidders could not read the document before the explanation meeting and at the end, in explanation meeting the bidders only hear the reading session of the bidding document by the procurement committee, which is exhausted and spend most of the meeting time, without helpful explanation and discussion. Badly, some of the meetings process ends with the argumentation in the administrative aspects. The problems would come near the due date of the proposal submission date, because at the end the bidders would confuse with some of the technical aspects in the bidding documents. Usually, the bidders would contact the procurement committee by phone or if possible meet directly, which would raise the collusion between some bidders and the procurement committee. Moreover, sometimes the debate happened in the opening of the bidder quotations because some of the dispute in the technical aspects that have not been discussed clearly in the explanation meeting.

Badly, very often, the RFP has been published illegally to only small number of the bidders before formal announcement. Another problem, the RFP was published in a short/limited time before the quotation submission date. As a result, there was no time for the bidders to submit a sound and comprehensive proposal because they only could submit what they can in a short time with minimal standard. Beside this leakage, detail estimation cost, which is confidential according to the Indonesia regulation, sometimes was distributed illegally to some bidders that could make the bidding process unfair and the price quotation to be received would not competitive.

#### ***Evaluation Process***

In the evaluation process of the Indonesia public sector IT procurement process, it is often there was confusion between administrative evaluation and technical evaluation. Sometimes the procurement committee gave quantitative technical point for administrative evaluation, which is only needed pass or not pass decision according to the Indonesia procurement regulation. Furthermore, sometimes the procurement committee, without the involvement of a competent technical team, did the technical evaluation.

The criteria for technical evaluation were usually made very complex. Very seldom, there was a simple criteria in the technical evaluation. It is very important to make the evaluation criteria in a simple way, which is the consistency between the proposal and the functional and technical requirements, technical support aspects, maintenance aspects, training aspects: implementation methodology; and the flexibility of the system development in the future.



### ***Winner Submission and Approval***

In practice, it is often the procurement committee has submitted the winner of the bid without submitting the rank of the bidders. As a result, the responsible officer or project manager is only selected the winner based on the procurement committee recommendation, without doing direct review or doing correction to what has been submitted by the procurement committee. Usually, the objective of this practice is to minimize the complaints and internal debates. If there was different conclusion or opinion between the project manager and the procurement committee, usually solved with the revision the entire evaluation documents. It is very rarely the different conclusion was documented well.

Sometimes the bidder who did not win the bid would submit the complaint. However, mostly the complaints were submitted to the procurement committee. In fact, according to the Indonesia regulation, it should be submitted to the project manager. It is very often the complaint were out of the regulation contexts. The bidder who made complaint only concerned with their positions. That is why they only complaint about what is related with their interest, not the procedural aspects.

### ***Contract Discussion***

It is very seldom, there was a discussion for contract draft between the project manager and the selected contractor/consultant before the contract finalized. Usually, only the procurement committee finalized the contract. In practice, the project manager only signed the contract without deep understanding the content of the contract. Badly, with the current regulation, the project manager is not assisted well with a specific team who is responsible in handling contract preparation and negotiation.

In practice, mostly, the contract of IT procurement in the public sector was never been updated periodically. The government institutions were only used the existing template, without significant modification. In reality, the requirements in one contract would be different if compared with the other contracts. For example, the contract requirements between the consultant contracts would be different if compared with the contractor contracts. Even, sometimes contract preparation for a complex IT procurement without the lawyer involvement (from internal or external). In practice, the poor stated requirement contract would make weak enforcement to consultant/contractor.

### ***Goods/Services Delivery***

Mostly the suppliers of the IT procurement in Indonesia delivered the goods/services without delivery order. The consultant/contractor did not deliver reports and documentations that were required in the bidding document. Sometimes, the consultant/contractor argued the documentations were not part of the delivered output. It is also happened to the source code of the application system project. This could become the problems for the government institutions when the government institutions want to improve or modify the system in the future. The consultant/contractor also seldom delivered the as-built drawing and system configuration. Although in the some projects, the project manager received the documentation, mostly it was without direct checking with what really installed or configured in the field. As a result, some of the documentations did not match with the reality or what really installed in the field.



### ***Acceptance Test***

In the IT acceptance test, the project managers in the Indonesia public sector IT procurement tend to leave the acceptance test process to acceptance/receiving committee. Unfortunately, sometimes the committee did not have a competent people to do acceptance test. According to the Indonesia regulation, it is also not clear the position of the acceptance/receiving committee. In reality, their roles are only important for the formal payment process and at the end, the responsible person for acceptance test is the project manager.

On the other side, user acceptance test mostly was directly done in the end-user side, without the direct testing in the contractor side. As a result, there were major problem found in the user acceptance test. Unfortunately, in the IT procurement process, the government institutions were seldom to recruit the supervisory consultant/quality control.

### ***Operation and Technical Support***

In the operational and technical support aspects, mostly IT system in the government institutions have been operated or implemented without acceptance test. The mobilization in the early operation stage was not clear and without sufficient budget. In practice, the suppliers had to pay some unanticipated cost for early operation stage (mostly for human resources, supplies, and so forth.). Ideally, it shall be anticipated by government institution in the budgeting process.

Sometimes, in the IT government contracts the requirements for technical support and maintenance (for services and spare-parts) were not clearly stated. The term for technical support and maintenance mostly too short (usually is only for 1 year). Ideally, the term for technical support and maintenance for IT infrastructure should be the same with the estimation time that the operation and transfer of knowledge is running well (according to the IT maturity product). Usually, for IT infrastructure, it needs at least 3 years.

### ***Conclusion***

If compared to the Cluster Consultant Framework of IT procurement process, it is concluded that there are some problems in the Indonesia IT government procurement processes. The Indonesia government should solve these problems.

It is recommended there would be next research in the future that could give some more recommendation to solve the problems so that efficiency and effectiveness in the Indonesia public sector IT procurement process could be achieved. At the end, it could optimize the government revenue from public taxes and improve IT governance in the Indonesia public sector.

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